



# Evaluating the Implementation of the Universal Postnatal Contact Services in Queensland: The Experiences of Health Care Providers and Mothers

Report prepared by:

Wendy Brodribb<sup>1</sup>, Maria Zadaroznyi<sup>2</sup>, Aimée Dane<sup>3</sup>

<sup>1</sup> Discipline of General Practice, School of Medicine, The University of Queensland

<sup>2</sup> Institute for Social Science Research, School of Social Science, The University of Queensland

<sup>3</sup> Queensland Centre for Mothers & Babies, School of Psychology, The University of Queensland

Report prepared for:

Terry Price

Director

Primary, Community and Extended Care Branch

Queensland Health

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## **Executive Summary**

This report details the findings from Phase 2 of the evaluation of the Universal Postnatal Contact Services (UPNCS).

### ***Procedure***

The Phase 2 evaluation involved the collection of primarily qualitative interview data from a variety of stakeholders. It includes interviews with key informants from 26 of the 41 birthing facilities in Queensland by telephone or face-to-face (response rate 63%). A comparative case study approach was used in six case study sites. The research team visited each of these sites, conducted face-to-face interviews about postnatal care with a broad range of stakeholders including mothers, observed facilities and collected informational material and other documents relevant to the evaluation. Interviews were conducted with 70 mothers, one father (a sole parent) and 49 service providers (eight of these face-to-face interviews were with key informants from birthing facilities as noted above).

### ***Results***

All health services have implemented the UPNCS so that almost women who birth publicly are screened antenatally for domestic violence, depression, tobacco, drug and alcohol use and psychosocial wellbeing. In addition, nearly all women receive contact from a midwife or child health nurse within the first 10 days following hospital discharge.

There were substantial variations in the way UPNCS has been planned and implemented. This has led to a wide range of outcomes for mothers with regard to the timing, frequency and nature of postnatal contact.

Some of the more important aspects of service organization which had a clear impact on mothers' confidence and satisfaction included:

- information dissemination to mothers about postnatal contact
- timing of contact
- frequency of contact
- level of integration of hospital and community based services
- co-location of antenatal and child health clinics
- level and quality of communication between hospital and community based services
- information dissemination to mothers about community based support.

Difficulties with the role out of UPNCS included: funding maldistribution between maternity and child health; substantial increase in the time (and therefore space) required for antenatal booking appointments; increase in requirements for staff training to administer and respond to the psychosocial screening; inadequate transfer of information from hospital to community services; and insufficient collaboration between birthing services and child health exacerbated by separate governance structures.

Current UPNCS policy does not cater for mothers whose infants are admitted to other hospitals, nor for women who birth privately.

### ***Recommendations***

- Treat mother and baby as a single unit for at least the first three months after birth
- Recommend that contact with mothers, including home visits, occur within the first few days after discharge

- Correct any funding maldistribution so that the part of the service that is doing the work receives the money
- Provide sufficient funding to allow for extra antenatal clinic time and staff training
- Recommend screening occur early enough in pregnancy for care pathways to be implemented
- Encourage screening for depression during postnatal contacts. In many areas this is already done, but women with depression are often those who do not access the services provided
- Consider having birthing services and child health under the one governance structure
- Ensure postnatal contacts are 'mother-centred'
- Foster the provision of combined postnatal maternity and child health services
- Develop satellite clinics where antenatal visits, Newborn and Family Drop-in Services and ongoing child health visits can be accommodated
- Improve referral mechanisms and collaboration between birthing facilities and community services such as child health and GPs
- Review the mechanism for record keeping and transfer
- Develop strategies for the inclusion of women whose babies are transferred to a larger hospital because of medical problems
- Ensure information about postnatal services is readily available to public and private mothers in the antenatal period
- Develop mechanisms so that women who birth privately receive adequate postnatal care following hospital discharge

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## **Abbreviations**

ANC Antenatal clinic

ATODS Alcohol, Tobacco and Other Drugs Service

DON Director of Nursing

EMS Extended Midwifery Service

GP General Practitioner

LC Lactation Consultant

Multi Multiparous

NFDS Newborn and Family Drop-in Service

NUM Nurse Unit Manager

OCNO Office of the Chief Nursing Officer

Primip Primiparous

SCN Special Care Nursery

UPNCS Universal Postnatal Contact Services

## Introduction

The nature of postnatal care has changed in recent years as postnatal hospital stays have dramatically shortened. In the 1950s, women spent an average of 8-14 days in hospital after birth (Rush, Chalmers, & Enkin, 1989). During this time, women would receive both postnatal care and education. In 2009, women spent an average of two days in hospital after a non-instrumental vaginal birth and four days in hospital after a lower segment caesarean section. In Queensland 16.7% of mothers were discharged within two days of birth and 62.7% within 2-4 days. This is the highest rate of hospital discharge before five days in Australia (Li, McNally, Hilder & Sullivan, 2011). The reduction in the average postnatal hospital stay means that providing comprehensive postnatal care and education before discharge is no longer feasible and must now also take place in the community.

In Queensland there are a variety of community-based postnatal care options after discharge, although services lack integration with birthing hospitals and other postnatal providers. Consequently, many women 'slip through the cracks' and receive little to no postnatal care once discharged. One major consequence of this lack of integration is women's dissatisfaction with their care after birth.

Women's dissatisfaction with postnatal care has been well documented in Australian and international literature (e.g. Brown, Davey, & Bruinsma, 2005; Fenwick, Butt, Dhaliwal, Hauck, & Schmied, 2010; Miller, Thompson, Porter, & Prosser, 2011; Waldenstrom, Rudman, & Hildingsson, 2006) and was highlighted as a major issue in the most recent independent review of Queensland maternity services (Hirst, 2005). Consumer submissions to the review described lack of support postnatally, feeling unprepared for one's new baby and difficulty accessing child health clinics. Consequently, a key recommendation of the report was an improvement in the way postnatal care is provided in Queensland. Hirst (2005) suggested integrating antenatal, intrapartum and postnatal services as well as integrating hospital and community-based services.

In Australia, states such as Victoria and South Australia have recognised the need to improve postnatal care and taken steps to do so. They have improved discharge planning and created greater integration of hospital and community-based services with the aim that all women receive some form of postnatal contact once they leave the hospital (Brown, et al., 2005; Zadoroznyi, 2006).

### ***The Universal Postnatal Contact Services***

In response to Hirst's (2005) recommendation regarding postnatal care, the Queensland Government has funded the Universal Postnatal Contact Services (UPNCS). The key outcomes of the services were: 1) universal screening of all women antenatally for depression, domestic violence, drug and alcohol use, psychosocial wellbeing and smoking; 2) universal follow-up of new mothers following hospital discharge (either by telephone or a home visiting service) and 3) access to community-based drop-in centres. The Newborn and Family Drop-in Services (NFDS) were to be an integral part of the UPNCS as detailed in the Service Guidelines. It was anticipated that these drop-in centres would improve the exchange of client records between hospital and the community, improve the identification of women who would benefit from referral to other services and provide access to information.

The UPNCS was funded in three stages. In June 2008, nine birthing facilities were funded. In June 2009, a further 14 birthing facilities were funded and in June 2010, the remaining 18 birthing facilities in Queensland were funded. Facilities were expected to have implemented UPNCS within six months of receiving funding. In addition, six sites were expected to have developed a Newborn and Family Drop-in Service by December 2008.

In August 2011 the Queensland Centre for Mothers & Babies (QCMB) submitted a report of Phase1 of the evaluation that examined the implementation of the second component of the UPNCS (i.e., whether women were receiving at least one postnatal contact after being discharged from hospital)(Dane, Thompson & Miller, 2011). They found that women who birthed in a facility that had implemented the UPNCS were significantly more likely to have received a phone call or home visit within 10 days of hospital discharge than women who birthed in a facility that had yet to implement the service. When adjusting for factors influencing satisfaction, the



more contact women were given during this period, the more satisfied they were with the amount of postnatal contact they received. However, receiving one or two home visits did not appear to increase a woman's satisfaction with the quality of care. In addition, there was no relationship between a woman's confidence in looking after her baby when leaving hospital and the number of postnatal contacts she received (Dane, Thompson & Miller, 2011).

This report, of the second phase of the evaluation, complements the previous report with a qualitative description and analysis of the implementation of UPNCS. In particular, it focuses on the implementation process and how the services are conducted in different areas throughout Queensland. In six case study sites a more in-depth analysis was conducted with individual and focus group interviews with mothers, health service staff and community providers. At the time of the Phase 2 study all birthing facilities had implemented the UPNCS.

### ***The Effectiveness of Postnatal Care Programs***

To date, limited studies have examined the effect of postnatal care programs on women's satisfaction with postnatal care, confidence to look after their baby and more tangible outcomes such as breastfeeding rates, postpartum depression, personal wellbeing and emergency room visits. Programs vary greatly in the timing of post-discharge contact, the type of contacts, the number of contact sessions, the content of the sessions and the population targeted. Consequently, the effectiveness of these programs also varies.

Studies that compare post-discharge clinic or hospital visits with home visits (within 48 to 72 hours of discharge), among low risk women and babies with hospital stays of less than 48 hours demonstrate the relative effectiveness of postnatal home-visiting programs (Lieu et al., 2000; Escobar et al., 2001). Women who received a home visit were significantly more likely to rate the amount of time spent, convenience, advice given, caring attitude of provider and overall care as 'very good' or 'excellent' than women who had a clinic visit. However, there were no differences in breastfeeding discontinuation, depressive symptoms or other clinical issues. Another Canadian study also found that women who had health professional contact (either a phone call or home visit) within 72 hours of discharge were more satisfied with their postnatal care, less likely to be depressed one month postpartum and their infants were less likely to be readmitted to hospital (Goulet, D'Amour & Pineault, 2007).

However, Gagnon et al. (2002) found no significant difference in satisfaction with postnatal care, breastfeeding frequency or infant weight gain when a telephone call plus home visit was compared to a telephone call plus clinic visit.

A more recent study of low risk, first time mothers compared one home visit within 10-14 days postpartum with weekly home visits from 10-14 days to eight weeks postpartum. Women who received weekly visits were more confident and rated their satisfaction with care higher than the women who received one home visit. They were also less likely to have used emergency services, but had similar rates of depression (Christie & Bunting, 2011).

While some other studies have found a positive relationship between postnatal care programs with satisfaction (Jirojwong, Rossi, Walker & Ritchie, 2005) and breastfeeding rates (Kronborg, Vaeth, Olsen, Iversen & Harder, 2007), others have found that home visiting or telephone calls failed to have a positive effect on the outcomes measured (Bunik et al., 2010, McDonald, Henderson, Faulkner, Evans & Hagan, 2010, O'Connor et al., 2003).

Because of the heterogeneity of the interventions evaluated it is difficult to reach a definitive conclusion about the effectiveness of postnatal contact after discharge. Effectiveness may be influenced by many factors, including whether the intervention is being compared to another type of contact or no contact, the length of hospital stay, the content of visits or phone calls, length of visits, the time between hospital discharge and first visit or phone call and the amount of contact after birth. While it is challenging to tease apart these factors, it appears that women, who are contacted within 48-72 hours of discharge, are more likely to be satisfied with their care (Escobar, et al., 2001; Lieu, et al., 2000, Goulet, D'Amour & Pineault, 2007). However, when contact is provided later, there may be no difference in satisfaction (Gagnon, Dougherty, Jimenez & Leduc, 2002). These

findings suggest that the earlier the postnatal contact after discharge, the more likely women are to be satisfied with their care. The above studies also varied in the amount of contact provided after birth. Christie and Bunting's (2011) study indicates that weekly visits over six weeks, even when the first visit is provided within 10-14 days of discharge, is associated higher levels of satisfaction and confidence compared to one visit within 10-14 days postpartum. This suggests that sustained visits over a number of weeks can increase satisfaction and confidence, even if this contact is not provided soon after hospital discharge.

It is apparent that the design of a postnatal care program influences its effectiveness. Therefore, in addition to assessing the implementation of UPNCS, we were interested in investigating mothers' opinions and perceptions of the different aspects of the program.

## Methodology

The second phase of the evaluation involved the collection of primarily qualitative interview data from a variety of stakeholders and comprised two components:

1. Interviews were conducted with key informants from 26 of the 41 birthing facilities in Queensland (response rate 63%). Of these, 18 were telephone interviews, and eight face-to-face. These interviews provide a comprehensive overview of the range of ways in which the UPNCS was planned and implemented across Queensland.
2. A comparative case study approach was used in six case study sites. The research team visited each of these sites, conducted face-to-face interviews about postnatal care with a broad range of stakeholders including mothers, observed facilities and collected informational material and other documents relevant to the evaluation. Interviews were conducted with 70 mothers, one father (a sole parent) and 49 service providers (eight of these face-to-face interviews were with key informants from birthing facilities as noted above).

The comparative case study design was used to enable: a better understanding of the factors which contribute to positive outcomes given the wide variation in contextual features across sites and in processes of implementation; and a detailed exploration of the perspectives of a range of key stakeholders, including mothers and a wide variety of community health and social care providers.

The case study sites were selected on the basis of variation on the following criteria:

- The timing of the rollout of UPNCS (early, middle and late)
- Urban, regional and rural location
- Socio-demographic characteristics of the population (including indigeneity)
- The design of postnatal care programs
- Levels of coordination between hospital and community care services
- Availability of private maternity hospitals

The case study sites were:

1. Greater Brisbane (RBWH and Mater Mothers)
2. Logan
3. Mt Isa
4. Rockhampton
5. Toowoomba
6. Townsville

Ethical approval for the study was obtained from The University of Queensland Behavioural and Social Sciences Ethical Review Committee. Data collection occurred between July and December 2011.

## Recruitment

Full details of the recruitment strategy used in the case study and non-case study sites are provided in Appendix 1, and recruitment letters and other documents are in Appendices 2 to 16. Key informants in Queensland Health Service Districts were contacted by letter to inform them of the evaluation and to request their participation. Initial contact was followed up by telephone or email. Community postnatal service providers such as general practitioners and pharmacy nurses were informed about the research through their place of employment and asked to contact the research team if willing to be interviewed. Mothers were recruited through a variety of avenues including invitations to new mothers' groups, young parent groups, playgroups, child health clinics and Australian Breastfeeding Association (ABA) groups.

## Case Study Site Interviews

### Key Informants

In the case study sites, a total of 49 interviews were conducted with key informants and staff involved in postnatal care. Of these, 28 were key informants with some direct involvement in the rollout and/or implementation of UPNCS. These individuals were generally hospital based Queensland Health employees, and included Nurse Unit Managers, midwives, project officers, social workers, administrative staff and perinatal mental health nurses. A further 21 interviews were conducted with community based postnatal care providers: this group included child health staff, general practitioners, pharmacy nurses, psychologists and community support staff working with young parents. The number and type of interview conducted at each of the case study sites is shown in Table 1.

Table 1: Key Informant Interviews at Case Study Sites

Case study site	Key informant interviews, QH birthing facilities (N)	Community postnatal care providers (QH and non-QH)
Greater Brisbane (RBWH, Mater)	N = 5	N = 8
Logan	N = 2	-
Mt. Isa	N = 3	N = 2
Rockhampton	N = 10	N = 6
Toowoomba	N = 3	N = 1
Townsville	N = 5	N = 4
<b>TOTALS</b>	<b>N = 28</b>	<b>N = 21</b>

### Mothers

A total of 70 mothers were interviewed about their experiences of postnatal care; and one father who is sole parent of two young children was also interviewed. Mothers were aged between 16 and 39 years, and approximately 38% of them had given birth at a private hospital. A high proportion of the mothers interviewed – just over 50% - held a tertiary qualification of some type, reflecting the propensity for those with higher education to participate in research studies. Our broad recruitment strategy, including at young parents' groups, provided some offset to this trend, and approximately 14% of our sample of parents had not completed high school. Table 2 summarises the socio-demographic characteristics and numbers of mothers interviewed by case study site. The interviews with mothers from the Logan area are included with those of mothers from the Greater Brisbane area.

Table 2: Socio-demographic Characteristics and Numbers of Mothers Interviewed by Case Study Site

Case study site	Number of interviews. Individual or focus group	Private	Public	Mothers' education	Mothers' age range
Greater Brisbane & Logan	15 mothers	8	7	13 with tertiary degree	22 – 37
Mt. Isa	10 mothers	2	8	5 with tertiary degree	24 – 39
Rockhampton	15 mothers	8	7	8 with tertiary degree; 3 did not complete HS	16 - 33
Toowoomba	10 mothers	4	6	6 with tertiary degree	21 - 34
Townsville	20 mothers + 1 father	5	15	4 tertiary; 7 trade	21-34
<b>TOTALS</b>	70 mothers 1 father	N = 27	N = 43	N = 36	

### ***Overview of Health Service Implementation***

Forty-one public birthing facilities in Queensland were involved in the rollout of UPNCS. The hospitals ranged in size from the Mater Mothers hospital in Brisbane (> 4500 births) to Theodore hospital (approximately 30 births). Five of the hospitals included were part of the original rollout of funds in 2008-09, 11 received funding in 2009-10, and 10 received funding in 2010-11.

A summary of the services available at each location is available in Table 3. Summaries of the key informant interviews are presented in Appendix 17 and 18. This section provides an overview of the implementation of the service and issues raised by key informants.

Table 3: Summary of Services Available at each Location

Health service	NFDS	Phone call	Home visit	AN screen	Comments
<b>Atherton</b> Births 210 Roll out Oct 09 Child health co-located with hospital	Yes - Atherton, Mt Garnett and Ravenshoe with midwife and child health nurse	Yes - Midwives make phone call 7-10 days after birth	No - Only if necessary and by child health	Case conferencing at booking and 36 weeks	Prior to funding indigenous women living out in the communities were unable to access postnatal care unless they came back to Atherton
<b>Ayr</b> Births 139 Roll out July 10 Child health co-located with hospital	No - but women given an appointment for child health before they leave hospital	Yes -Midwives – liaison with child health nurse if there is a problem	No - By child health only if thought necessary	Antenatal screening at booking – flagged but not good information about referrals	Struggling to find staff for UPNC Problems with implementing hand held record
<b>Bundaberg</b> Births 1200 Roll out Dec 09-Feb 10	Yes - Near CBD co-located with psychological service Well advertised Good integration between EMS and NFDS NFDS midwife visits hospital ward three days a week	Yes - For those not eligible for home visits – NFDS staff between 7-14 days Forms faxed to closest child health facility	Yes – within 20 Km and discharged within 3 days if primip, within 48hrs if multi and within 4 days with caesarean section– by hospital midwives (EMS) usually the day after discharge and may go for 2 weeks Refer to NFDS if need further assistance	Antenatal screening at booking for public women – can't be done if someone is with the mother	Service also offered to private women who birth at the hospital Trying to integrate some of the services with surrounding rural hospitals Follow up with women whose babies have been removed, transferred or died
<b>Caboolture</b> Births 1981 Roll out July 09-10	Yes- Political imperative to do NFDS first Runs out of Early Years Centre at primary school – staffed by midwife and child health nurse Outreach at Kilcoy (ANC as well) and Bribie Island	Yes - For those who don't have home visit. 30% outside their health service boundaries	Yes – if women want it or they have risk factors and they are within a geographic boundary. Don't aim for every woman to have a home visit. 84% have visit – usually 1	Antenatal screening at booking Those at risk assessed at meeting with child health – reassessed at 32 weeks and post birth Referred to child health and to GPs to access Medicare funded psychological help	Universal postnatal contact coordinator position
<b>Dalby</b> Births 245 Roll out July 10 Responsible for roll out in Miles, Tara, Jandowae, Chinchilla	No - Child health in the middle of town (hospital on outskirts)	Yes- Phone call for those who don't want home visit and those referred back to other communities, even if they get a home visit there	Yes – initial appointment given before leaving hospital 1-3 days after discharge – may visit for up to 8 weeks – then referred to child health Women referred back to local community for home visit follow-up by midwives.	Antenatally and screened at 4 weeks postpartum Weekly risk assessment meetings	Private women have the same services No early discharge Some midwives also work at child health Integration of charts between maternity and community health

<b>Emerald</b> Births 314 Roll out Oct 09 Child health co-located with hospital	Yes – based at child health co-located with hospital Runs one morning a week	Yes – all women rung on one day a week	No – may have home visit by child health for a specific need	? antenatal screening	NFDS staff child health and mid trained and LC – works at child health and maternity
<b>Gladstone</b> Births 540 Roll out Aug 09 Child health co-located with hospital	Yes – at child health and satellite clinic at Boyne Island Child health nurse who is also a midwife present Did have EMS midwife involved initially, but cut into her time for home visits Want to establish a service at Calliope where population growth is – but difficult to find premises	Yes – EMS midwife phone women who are not home visited	Yes – already had EMS that saw all women in health service geographic boundary (35 Km) to 10 days 5 day a week service EMS now shifted to child health rather than maternity Primiparous women also receive one visit from child health within 2 weeks of discharge from EMS	Screening at booking – conducted in community health building Multidisciplinary team includes adult mental health, youth and child mental health, child health, extended care midwife and antenatal midwife, paediatrician, the child protection liaison officer, child health nurse, social worker, ATODS rep	Some mothers resistant to antenatal screening (length and intrusive questions)
<b>Gold Coast Hospital</b> Births 3600 Roll out Dec 08 –Mar 11	Yes – outreach at Nerang and Coomera in child health clinics – has midwife and child health nurse present However, any baby who attends a child health clinic on the coast is counted in the figures	Yes - for those who do not have a home visit	Yes – 90% receive a home visit (usually 2) Triage to visit the next day or in 1-2 days after discharge – appointment made before discharge (previously only visited if early discharge<72 hrs, and in geographic area 55% of women used to get 4-5 visits)	Screening at booking visits at hospital or community will refer to child health, ATODS etc Referral pathways strengthened	LCs now working in NFDS rather than hospital Triage system in hospital - liaison midwife discusses discharge needs with each family – check screening/referral/work out what is needed Referral to child health if problems seen at home visit Much better discharge process from special care
<b>Goondiwindi</b> Births 87 Roll out July 10 All women have team midwifery model of care	In process – goal for NFDS to have child health, indigenous parenting officer, caseload midwives, early intervention staff etc in one location Want to be able to extend service to 12 months	Yes – to 6 weeks for those who live more than 30 mins away	Because of group midwifery model of care all women are seen by midwife to 6 weeks At 4 and 6 weeks linked in with GP and child health etc Only home visited if live within 30 mins	Screening done at booking visit Client issues meeting held weekly	Want everything under the one roof so care is seamless
<b>Gympie</b> Births 345 Roll out July 10 Child health co-located	Yes – 2 days a week with child health and midwife, and 1 day a week with child health only Outreach clinics at pharmacy in Gympie, Imbil, Tin Can Bay	Yes – UPNCS midwife (rostered Mon, Wed, Sat) takes referrals from hospital to child health where she does phone calls for all women who give consent	Only if needed following phone consultation – sometimes by midwife, sometimes by child health, sometimes by both if a number of visits needed	Antenatal screening – red flag referral to child health Rescreen 4 weeks postpartum Funding used to increase clinical hours to do	UPNCS midwife rotates every 3-6 months

	and Rainbow Beach run by child health only	Therefore calls within 24-72 hours of discharge Previously child health phoned all women discharged	Home visits may happen where outreach clinics held too	screening	
<b>Innisfail</b> Births 296 Roll out March 10 Child health co-located Funding pooled with Tully to run an integrated service	No - Close cooperation between maternity and child health but no designated NFDS	Yes – if decline home visit (not many) Few live outside catchment of Innisfail/Tully	Yes – EMS – appointments made before hospital discharge Innisfail or Tully midwife depending on location Indigenous women seen through EMS run by indigenous GP service. Woman must have referral to community health to be discharged from EMS	Antenatal screening throughout pregnancy and postnatally Referred if needed	Midwives rotated through service Community health liaison with maternity each day to ensure women have right referrals
<b>Kingaroy</b> Births 450 Roll out Dec 09 - Nov 10	Yes - at child health one day a week with midwife and child health nurse. Hoping to expand to an outreach clinic	Yes – if no home visit also referred directly to child health	Yes – if live within 25Km of hospital. Visits up to 2 weeks at 2 visits a week then referred to child health (written referral only if a problem) visits done 2 days a week	Antenatal screening and follow-up at 4-6 weeks through NFDS	Integrated service with community midwifery program in Cherbourg
<b>Logan</b> Births 3800 Roll out May 09	Uncertain – child health did run NFDS but recently changed to no longer having a drop-in service	Yes – for women outside the area Few eligible women refuse a home visit	Yes – home visits up to day 7 for a defined geographic area Run 7 days a week Usually 2-3 visits	Psychosocial screening at booking Referral to appropriate services for those at risk	Funding was with child health Now most functions done by maternity
<b>Mater</b> Births 4888 Roll out July 10	No- referral of women with problems to child health Others are given information but no formal referral given	Yes- Women who live outside the area or who are discharged after 72 hours	Yes - if live within the Mater catchment (? 20 Km) and are discharged within 72 hours (96 hrs for a caesarean birth) Home care midwife rings first to organise a time Most receive 2 visits ? up to day 10 7 day a week service	Antenatal psychosocial screening at booking Satellite services at QEII, Inala Also have group midwifery clinics at West End (young women) Coorparoo, Corinda and Southwest	Consent for UPNCS obtained during pregnancy and not postnatally
<b>Mt Isa</b> Births 600 Roll out July 10	No – Child health services available for all women Most are appointments but do have a drop-in vaccination program	Yes – For all women and to arrange a home visit for eligible women If unable to contact by phone a pro-forma letter will be sent Phone call within a week of	Yes – for women within a certain radius of the hospital – usually within Mt Isa town May be visited up to 6 weeks if necessary Home visit may not occur for	Psychosocial screen at booking. Unclear referral pathways for those at risk	Midwives work out of child health to do visits etc after collecting information from the hospital



		discharge	8-10 days following discharge		
<b>Nambour</b> Births 2227 Roll out Dec 08	Yes – at child health and outreach at Caloundra, Noosa, Coolum and Maroochydore – all run by child health only Used to have midwives – but took time away from home visiting	Yes – all women who give consent are rung and home visits organised for those identified Contact usually within the first day or so Child health sent a referral for all women	Yes – 1 visit only and then linked with local services Some women identified in hospital	Antenatal screening at booking and outreach clinics at Caloundra, Maroochydore and Noosa ( midwives to antenatal clinics – but no mention of child health co-location)	
<b>Proserpine</b> Births 304 Roll out Jan 10	Yes – at Cannonvale (community health centre) and Proserpine – staffed by child health nurse who is also a midwife and LC Antenatal community midwife visits in same area at Proserpine	Yes – for women who are not home visited – by maternity staff	Yes – for women in geographic area – by maternity staff	Antenatal screening Case conferencing fortnightly for antenatal and postnatal women at risk Significant changes needed	Birth women from Bowen and Collinsville who go back to their community for postnatal follow-up
<b>RBWH</b> Births 4699 Roll out July 10	No - referral to child health of women or infants with problems, but not routine referrals	Yes – For women not eligible for a home visit Referred to community services if appropriate	Yes – if live within the catchment No limitation based on length of stay 7 day a week service Mothers are rung the day after discharge and triaged to work out who needs a home visit that day and who can wait a day or so Most get 2-3 visits and they can continue until the infant is 14 days old	Increased time for antenatal booking because of screening Had to add a Saturday clinic to accommodate it Also has satellite antenatal clinics at Nundah (both for the birth centre and normal care)	Has a child health liaison nurse to communicate with the community midwifery service midwife – but it doesn't seem to be as seamless as it is in Townsville Not all women are referred to child health
<b>Redlands</b> Births 2025 Roll out Nov 10 Child health co-located	Yes – at Redlands co-located with hospital, Wynnum – staffed only by child health	Yes – if not home visited – phoned the next day	Yes – if live within 25Km radius visited every day to day 5 but can go up to day 7 5 day a week service Added extra midwife	Antenatal screening – had to increase time (40 min to 60 min)required and staff Case conferencing once a fortnight	
<b>Rockhampton</b> Births 1303 Roll out July 11	Yes – recently established at child health and in conjunction with satellite outreach clinics	Yes - for women who are not eligible or do not wish a home visit Conducted by EMS	Yes – if live within a 20 min radius of the hospital Conducted by the EMS and child health EMS will follow-up to day 10 but child health will continue to see women if needed	Antenatal screening at booking Two satellite antenatal booking sites implemented Antenatal Psychosocial Risk Assessment Team (APRAT) meets fortnightly	

<b>St George</b> Births 62 Roll out Sept 09 Child health co-located	No –women referred to child health after phone contact but may not be followed up	Yes – all women contacted within 5-10 days If the woman can't be contacted 3 times – flagged to child health	No – occasionally a home visit organised by a midwife, child health nurse or aboriginal health worker	All women talked about at multidisciplinary team meeting weekly and referred if necessary Satellite booking- in visits done at Dirranbandi and Mungindi once or twice a month	Try to get women who are birthing outside St George to come to the hospital once during their pregnancy to find out about the postnatal services available
<b>Stanthorpe</b> Births 147 Roll out Nov 10 Child health co-located Team midwifery model	No- child health runs 3 days a week and women are referred after home visit Women tend to 'drop-in' to maternity if they have a problem – but nowhere really private for them to sit	Yes – between 24-72 hours depending on need Then referred to child health – especially if an issue has been raised	Yes – home visit booked before discharge – know which midwife is going to visit Service slow to start because mothers were unsure about it Information about women over the border who want a home visit is sent to the Tenterfield child health nurse	Formalised screening process – may be over more than one visit Screening postnatally depends on who is available Case conference each week after antenatal clinic about concerns	Telephone contact and home visits for private women but not recorded on UPNCS figures
<b>Theodore</b> Births 30 Roll out uncertain Child health co-located	No - ? child health in Theodore Women refusing to have info faxed to child health in Biloela	Yes – if live outside 10 Km and asked to return to the hospital if there is a problem or for neonatal screen etc Contact 1-2 weeks after discharge	Yes – within 10 Km	Antenatal care in the private medical centre by hospital midwives – No women at risk yet identified	UPNCS midwife works 1 day/week
<b>Thursday Island</b> Births 170 Roll out Oct 10	No	Yes – midwife present at birth rings mother within 1-2 days of discharge	No – not routinely as don't have a car – but midwife using own car to visit women who can't attend clinic	Antenatal screening at booking Extended from 1 hour to 3 hours May be done at 36 weeks too Outreach clinic at Bamaga	Come to mat unit within 1 <sup>st</sup> week, child health at 2 weeks, maternity at 6 weeks and child health at 8 weeks. Child health appt only
<b>Toowoomba</b> Births 1875 Roll out Jan 09 Child health co-located	Yes – in a house separate from the hospital and near the CBD Staffed by midwife and child health Open 3 mornings a week	Yes – to all women who do not have a home visit or live out of the area – midwife from UPNCS Home visit eligible women also rung by maternity home care and triaged – some women will not receive a home visit if not thought necessary	Yes – Maternity home care – sits with child health All women within geographic boundary are eligible Weekday service only to day 7	Antenatal screening done at 36 weeks	UPNCS sits with child health and not maternity
<b>Townsville</b>	Yes- at three satellite sites –	Yes – All women not home	Yes- If discharged before 72	Antenatal screening at	Child health liaison nurse

Births 2500 Roll out Dec 08	Northern Beaches, Upper Ross and Early Years Centre with a midwife and child health nurse Antenatal care also done at Upper Ross and at Kirwan where the main child health clinic is situated	visited are rung (20%) Information about women who come from further afield is faxed to the local health service so they can arrange home visits if possible	hours and live within a 30 Km radius Visited by midwifery care program for up to 10 days 7 day a week service Women who are discharged after 72 hours and live within a 30 Km radius are referred to child health who rings and does a home visit within a week of discharge	booking Pathways for referral and ongoing care	based at the hospital makes sure all women have ongoing follow up from UPNCS, child health, or their local health service
<b>Tully</b> Births 20 Roll out July 09 Child health co-located Provide service for women who birth in Innisfail, Townsville and Cairns	No	Yes – for those who refuse home visit (but may change mind) Usually within 24-48 hrs of discharge	Yes – EMS offered visit before discharge, but ring to confirm Visit within day of phone call Referral to child health	Antenatal screening Multidisciplinary meeting once a week to discuss women at risk	

## **Implementation**

There was no consistency in how each area planned and developed an implementation strategy for UPNCS. In some facilities a steering committee was established with broad based representation and membership from areas such as maternity, child health, antenatal clinics, allied health, GP liaison and child mental health. A community representative was included on several, but not all, committees. Occasionally there was considerable stakeholder and consumer consultation, especially about the establishment of the Newborn and Family Drop-in Service (NFDS). Other facilities had a small group of people who worked towards planning the service with little external input, especially from the mother's viewpoint.

The changes needed to implement UPNCS depended on what services were already in place. Facilities that already had some postnatal contact and undertook some antenatal screening required minimal adjustment, while others are still coming to terms with what is required. In the larger centres funding was often used for a project officer to investigate and organise the necessary changes, to update resources and/or train staff about the service. Early on in the process the emphasis was on establishing NFDS and for many project officers at that time, the main focus was on finding suitable accommodation for the main or satellite services. Value adding to the existing services was an important feature described by many key informants.

*We actually built on what we already did. We didn't go out with the plans of starting something brand new; particularly when ... about 80% of the mums were being offered the early discharge program from here [the hospital]. We did try to be quite frugal really with the money so that we could get the maximum impact with the minimum resources.*

Where a close relationship between maternity and child health already existed UPNCS strengthened those relationships and enabled a virtually seamless service for women from the birthing facility to the community to develop. This was particularly evident in services where maternity and child health are under the one umbrella in the hospital's governance structure. In contrast, when the relationship between the two was distant, or the services were not even in the same health service district, it was more difficult to integrate services in a collaborative manner, with neither party really understanding the others' perspective.

*We've always had this underlying tension between [child health and the hospital] but we saw it [UPNCS] as a benefit to try and strengthen those ties, but it still felt a little like them telling us what to do. This was them coming in and saying this is what we want to do, this is how you're going to do it and we want this, this and this from you.*

The majority of services found the assistance they were given by Queensland Health in establishing the service very helpful.

*There was an implementation guideline which was really, really great which outlined very clearly what the funding was for and what our outcomes were, what our KPIs were.*

However, with a rapid turnover of staff in more isolated areas the implementation process has been fraught with difficulty, with some key informants not being clear about the purpose of the service, or given resources to help with implementation.

*I had gone to the website, but that was just a general overview and I couldn't really work out ... what we were supposed to be doing.*

*... that to implement something like this, they almost need an external project person to come in and work with people ... I don't have anything to check off to say, yes, this is what I should do.*

One key informant thought that the information she was given about how to implement the service was limited and that if she had not had the extensive background she had, then setting up the service would have been very challenging.

## **Funding**

Because the UPNCS requires integration and collaboration between two different groups of people, whose financial responsibilities and accountabilities were often quite separate, allocation of the funding was a contentious issue in a number of places. For the majority, funding was 'held' by the birthing facility and in others, the funding was attached to child health. It appeared as though inequities sometimes existed in how these funds were then allocated between the birthing facility and child health.

*We've discovered that that [funding being with child health] really wasn't beneficial, that it probably needed to come more towards the hospital because we do the majority of the work that's involved.*

Again, when child health and maternity were under the one umbrella, issues with funding were not apparent.

Another issue that was raised was the need for funding of hospitals that do not undertake births, but do provide ante and postnatal care for women in their area.

## **Antenatal screening**

Many hospitals were already undertaking some form of psychosocial screening prior to the introduction of UPNCS, but the extra funding enabled them to include all the elements required with UPNCS (domestic violence, depression, drug and alcohol use, tobacco use and psychosocial wellbeing) and to streamline the process. All but one hospital undertakes the screening at the booking appointment that varies from 12 – 20 weeks. The remaining hospital screens at 36 weeks because booking appointments are usually early (around 12 weeks). Some hospitals also endeavour to update the screening at 32 or 36 weeks and then in the postpartum period through the NFDS.

The majority of the hospitals have a system of case conferencing for women deemed to be 'at risk.' These meetings vary from weekly to fortnightly to whenever it is required. Most meetings are multidisciplinary and, where appropriate, include midwives, child health nurses, social workers, perinatal mental health staff, ATODS staff etc. In some areas women may be referred to their GP to access Medicare funded psychological help. Early child health referrals can be facilitated and interaction between child health and the woman can occur before the birth.

A number of issues around the introduction of the psychosocial screening were mentioned. These include:

### **a) Time**

Many hospitals mentioned that the screening took up a considerable amount of time and that antenatal appointments had to be increased in length to accommodate the added workload. For some hospitals it changed the way antenatal care was delivered. For example, RBWH increased appointment times from 60-90 minutes and Thursday Island increased appointment times from 1-3 hours. In Toowoomba, previously the midwives only saw women at 12 weeks. Now they also see them at 36 weeks. These changes have led to the need to increase clinic times and to employ more staff.

### **b) Space**

To accommodate the increased need for clinic times a number of hospitals run satellite clinics, or have extended hours to include evening or Saturday clinics. For example, in Rockhampton two satellite antenatal clinics have been established, one of which is in conjunction with a child health clinic. Logan hospital runs antenatal clinics in nine community locations in either Queensland Health or community

facilities, as well as having evening and Saturday clinics. Women appreciate satellite clinics because they are closer to home, it is easier to find parking and they are smaller and somewhat less impersonal than those based in the hospital. For clinics held in the same facility as child health clinics or NFDS the mothers can see and meet staff who will be caring for them postnatally.

*So women who are pregnant are seeing the care of newborn babies, they're watching the breastfeeding, they're hearing the stories and vice versa ...[t]he pregnancy visits occur ... where they've met the child health staff, met the other women, had their education, birth, go back there for their child health and the cycle starts again.*

#### *c) Difficulty asking some questions*

Some interviewees mentioned the difficulty of asking some of the questions, particularly with regard to domestic violence, if the partner or another person attends the appointment with the mother. A number of hospitals have found ways of overcoming this problem such as having a separate time for the mother and the father or asking the pertinent questions when taking the woman to the toilet.

#### *d) Staff Training*

Some questions are quite intrusive to ask, especially if the midwife has never met the mother before.

*You've got to quickly establish rapport with the women. [They] are often suspicious when you start asking questions about where this information is going despite the fact that you ensure their confidentiality of the information. They are quite intrusive tools... very personal questions.*

A number of hospitals mentioned the need for staff education and training so that staff would feel comfortable asking the mother the questions, and knowing what to say and do if they received an unexpected answer. For example, Townsville hospital has run a number of training days and has given staff an opportunity to attend Family Partnership Training. Others felt that the implementation had been rushed, before the staff were sufficiently trained to administer the screening effectively.

*It would have been good to have some more education to the staff about it because it caused a lot of angst to the staff as well.*

*- there was a lot of education that was promised up front as part of the roll-out and that didn't sort of materialise until a long way down the track, until long after we had things up and running.*

#### *e) Development of Adequate Resources and Referral Pathways*

Most hospitals have had to create, improve or update referral pathways for women identified 'at risk' with the psychosocial screening.

*The main thing is the process after the assessment is being done. There's no point in taking the information and not knowing what to do with it.*

This process has led to closer relationships between different areas within the health services in some instances. However, in some smaller and more isolated hospitals referral pathways do not appear to be as robust and poor communication and information transfer between different parts of the service persist.

In conjunction with the social workers and other stakeholders, some hospitals have also developed information sheets for women who do not warrant referral, but would benefit from some guidance with issues such as anxiety or financial pressures.

### ***Universal Contact***

All health services interviewed have systems in place to ensure women who birth at their hospital are contacted post-discharge. Because of the significant variation in existing services, models of care, the size of the hospitals and the rurality of the service, how universal contact of birthing mothers is achieved also varies considerably with some systems appearing to be more effective and seamless than others.

Women who birthed using a case load midwifery or team midwifery model of care, either in a stand-alone birth centre or within the hospital birth suite, tended to be followed-up differently after hospital discharge than other women. Most had home visits from one midwife, or midwives they were familiar with, until six weeks postpartum. In some hospitals women who were transferred from these models of care during labour still had follow-up from the case load or team midwives. At the RBWH follow-up is only for two weeks and women who birth within the team midwifery model are visited by the community midwifery service.

#### ***a) Home Visits***

Many hospitals already had a home visiting service in place prior to the implementation of UPNCS, although they ran under a number of different names such as maternity home care, extended midwifery service or community midwifery service. While the majority of these visits were undertaken by midwives attached to the maternity facility, in some areas (e.g. Toowoomba) the home visiting service has been run through child health for a number of years. In many places where a home visiting service was already in place UPNCS has enabled the service to expand its geographic boundaries or to relax other eligibility criteria. For example the Gold Coast service was able to increase its geographic range with the UPNCS funding and now 90% of women who birth at the hospital have a home visit from a hospital midwife.

All but five hospitals have the capacity to offer women home visits under UPNCS with most having some eligibility criteria such as geographic location, length of hospital stay or need. Nearly all services have a specific geographic location that they cover. These range from 10 Km in Theodore to 35 Km in Gladstone. For the five hospitals where home visiting was not a routine, home visits could usually be arranged with a child health nurse if a problem was identified during the follow-up phone call.

While the larger birthing facilities were able to run their services seven days a week, other birthing facilities only staffed their service five days a week or, in some instances, only had home visiting one day a week. For a number of facilities length of stay also determined whether women were eligible for a home visit with cut offs of 48-72 hours following a vaginal birth most common. The majority of women who were discharged within 48 hours were seen by the home visiting service either the day following discharge or the second day. However, with a five day a week service this is not always possible, especially over a long weekend. For example a woman who is discharged late on a Thursday or on a Friday morning may not be seen until Tuesday – four to five days after discharge. A small number of services did not visit women until 7-14 days after discharge.

Most services will endeavour to visit all eligible women. Other services use a triage system to prioritise women who are more in need of a home visit (e.g. early discharge, primiparous, feeding problems, and young women) and do not attempt to home visit every woman.



For most women who are not eligible for a home visit due to length of stay, further follow-up is by phone. However, in Townsville, women who stay longer than 72 hours are referred to child health who rings them within two business days and visits them at home within a week of discharge.

The number of visits and the age of the baby at discharge from the service also vary. Some services only see women to day 7 after birth, while others continue to see women to day 10 or 14. If there are ongoing problems there may be some flexibility in the length of time the woman can be followed and/or child health is contacted to continue the care. Some services will see the majority of women only once. Others, depending on the mother's need, may visit every day or second day until discharged from the service. Overall, most mothers would receive at least two visits (depending on length of stay).

#### *b) Phone calls*

All facilities telephone women who do not receive a home visit – either because of ineligibility (length of stay or geographic location), because they decline the service or because a home visiting service is not available. The timing of the call varies – from a day or two after discharge to 7-14 days after discharge. In some smaller services, which only employ UPNCS staff for a limited time, all phone calls are done on a limited number of days of the week. Most services use a pro-forma during the phone call to check the mother's and baby's health. However, one service was unaware that such a pro-forma existed and was in the process of designing one themselves. If a problem is identified during the telephone call the mother is referred to an appropriate service (e.g. child health, their GP, or the maternity ward). If a woman is unable to be contacted by phone, a letter is sent to her outlining the local available services. Sometimes they are also referred to child health who then attempts to make contact. Although most women only receive one phone call, unless there is a problem, some services continue to phone women to provide support.

*We'll call them ... just offer the phone support as any times as we need to. Not just a one off phone call.*

#### *c) Newborn and Family Drop-in Service*

In total, 18 of the 26 birthing facilities surveyed have developed Newborn and Family Drop-in Services (NFDS) that run for a limited time each week. Most accept mothers and babies up to 8 weeks of age although some do see older babies in conjunction with child health. The NFDS intended to integrate maternity and community child health services with the NFDS being staffed by a midwife and child health nurse and be separate from existing child health clinics that are often run on an appointment-only basis. With the combination of staff the NFDS could manage both maternal and baby problems. Some NFDS are run with child health nurses only, many of whom are also midwives, depending on the availability of staff.

While the establishment of the NFDS appeared to be an important aspect of the roll out of UNPCS at the beginning, birthing facilities that implemented UPNCS in the last roll-out were no longer required to establish a drop-in service. Outreach NFDS have been established in many areas and provide for the ongoing care of mothers and babies, especially in more regional and remote locations. For example Atherton established NFDS at Mt Garnett and Ravenshoe and now indigenous women living on communities are able to access postnatal care where previously they would have had to go back to Atherton hospital. In Townsville, one NFDS at the Early Years Centre is open on a Saturday morning as well as during the week. Antenatal clinics run in conjunction with some NFDS.

*They have a huge turnout of mothers because we have advertised that within our service as well, that there is a drop-in clinic ... the midwives are working closely with the child health nurses which we never did before. They have sometimes 20 to 30 women - mums coming in with their babies so it's been good.*

While NFDS may be incorporated into child health clinics on the hospital campus, in a number of locations a new community based facility was established. For example, in Toowoomba NFDS was originally set up in a shopping centre in a socially disadvantaged area. Subsequently it has moved to a house near the centre of town, with ample parking, access to bus routes and near a medical centre. The house has room for postnatal mothers groups and antenatal groups for adolescent mothers. NFDS in Bundaberg is also located near the centre of town – away from, but close to the hospital while at Caboolture the service is run out of the Early Years Centre in the Primary School grounds.

*I think it's helped be more accessible for women. I think to have a service that's free, that's drop in, that they don't have to make an appointment...*

Goondiwindi had yet to fully establish their NFDS when interviewed, but they were hoping to develop a centre that incorporated a number of services for women and children. These included the case load midwives, child health, indigenous parenting officer, early intervention staff etc and extend the drop-in service to 12 months.

### **Other Issues**

#### *Collaboration with Child Health*

In some areas there is close cooperation between the birthing facility and child health with all or most women being formally referred (by faxing the postnatal discharge/referral form) either at hospital discharge or on discharge from the home visiting service. All women discharged from one birthing facility (without a home visiting service) already have an appointment with the child health nurse the following week. In other areas women are told about child health, but not formally referred unless there are problems or issues that require ongoing assistance. In smaller towns some staff will work both in the maternity section and child health, providing continuity of carer across the services. Two facilities have a child health liaison nurse who works closely with the maternity home care coordinator to ensure women are either home visited or are referred to child health.

A number of key informants mentioned that it is difficult for mothers to get an appointment with child health and so they only refer women with problems.

#### *Charts and Documentation*

While the UPNCS is supposed to improve continuity of care from hospital to the community, one major issue raised was the completion of the Postnatal Discharge or Referral form that relies on the antenatal and hospital staff completing it with relevant information. Staff needed training in how to complete the form, and encouragement to do so. This is an ongoing process with staff changes. In some hospitals it was poorly done and the nurse/midwife assigned to the UPNCS spent a considerable time each day going through the hospital charts of discharged mothers to retrieve the information. In other situations where perusing the chart was not possible, the UPNCS nurse/midwife had incomplete information about the mother and/or baby when they rang or visited.

*So I think it is just helps them understand what kind of information that – how relevant it is ... if you were in my position and you were given a blank form, how do you know?*

At the Mater hospital the hospital charts are sent to the midwives organising post-discharge follow-up once the woman is discharged so they have all the necessary information. In Dalby, hospital and child health charts are integrated. In other areas there appears to be duplication of records/information. For example, in one location there was a hospital chart for the mother, a chart at NFDS for mother and baby

and a chart at child health for the baby – all with similar information that the mother has to recount. There was concern by some key informants that child health is unable to generate a chart for the mother and that creates a problem if NFDS is run by child health.

Townsville is implementing an electronic record for the maternity episode of care and they are hoping that this record will be able to be used by child health as well, so the records would be seamless. Outlying areas, for example, Charters Towers, would also have access.

### *Continuity of Care*

There were few instances of continuity of carer. Even if a woman was contacted (home visit or phone) two or three times by the one service there was no guarantee that she would be contacted by the same staff member on each occasion. In one birthing facility there is rotation of staff members through home visiting and it is arranged that a staff member who has cared for the mother in hospital will arrange a time for a home visit before the mother leaves hospital and will undertake that home visit. In other places the UPNCS and/or home visiting nurse/midwife will visit mothers in the ward and introduce her/themselves. Although good records and communication between staff will assist with continuity, having the same person visit or phone builds on rapport already initiated, reduces the risk of the mother having to 'tell her story' again, enables better comparison of the physical or emotional condition of the mother or baby between contacts and reduces the risk of information 'falling through the cracks'.

### *Eligibility Due to Length of Stay*

Because some services will only undertake home visits for women who were discharged 'early' or only follow them for a certain number of days, some women who have longer hospital stays because of medical problems (maternal or baby) may not be eligible for a home visit. However, these women may be in more need of a home visit than some other women as they are often discharged before they are completely well and are often have a slower recovery.

### *Special Care Nursery*

Women whose babies are admitted to the special care nursery are often difficult to contact and follow-up because they spend considerable time at the hospital with their baby. Their medical needs are often suppressed because of the concern for their baby. A number of hospitals have instituted specific programs to ensure these women receive appropriate follow-up under UPNCS. For example, RBWH had developed a clinic within the antenatal clinic for women to whose babies are in special care.

Women whose babies have been transferred to larger hospitals from rural and remote areas present different challenges. If the mothers are not admitted to the maternity ward, the UPNCS staff from the larger hospital are not aware and have no responsibility for them. Although in theory the discharging hospital should have the responsibility to contact these women, it would be more appropriate for them to be seen by staff from the larger hospital.

### *What about the Private Women?*

Although this initiative is termed 'universal' for the vast majority of places it is only applicable to women who birth publically. However, in a small number of rural hospitals some women will birth privately. These women rarely have psychosocial screening antenatally – although one hospital is working with the GPs to encourage women to attend the hospital antenatal clinic once during their pregnancy so they can be screened. Three or four birthing facilities provide the same postnatal care following discharge to women regardless of whether they have birthed publically or privately.

### *Overall Impressions*

For the majority of the people interviewed, UPNCS has provided funding and a mechanism to improve the service to mothers and babies and improve communication and collaboration between different sections of the health service.

*Better networking between maternity and child health, positive feedback from the clients regarding better continuity of care, been a significant increase in breastfeeding support and education for mothers and for staff as well ... Can link in quicker with social workers, mental health, GPs. GPs have been referring back to Child Health because they know that the service exists*

*Vastly improved, lines of communication are now transparent and clear and facilitate the discharge process for clients. It has also been amazing for discharging babies from the Special Care Nursery because the triage team have been involved in the process. So now the preterm babies are being sent home with all the support in place.*

*There is more integration and this integration has been beneficial. If a woman can't get in to see a child health nurse or social worker, for example, then the midwives will liaise with these service providers to find a solution so that the woman can be attended to.*

## The Experiences and Perceptions of Mothers in the Case Study Sites

The case study approach enables the analysis of mothers' experiences and perceptions in the context of organizational structures and processes at each of the sites. We asked women to tell us about a number of aspects of their post-birth care. In particular we asked about their:

- Length of hospital stay
- the frequency and nature of postnatal contact following discharge from hospital
- whether they felt their length of hospital stay was long enough
- whether they had information about who to contact if there were problems, and how adequate they felt that information was
- how confident they felt about going home with a new baby
- how satisfied they were with a range of postnatal care providers

### *Universal Contact for Women Birthing in Public Birthing Facilities*

Almost all the mothers who gave birth in the public birthing facilities had some form of contact within 10 days of discharge from hospital and this pattern was consistent across study sites irrespective of the time since implementation of UPNCS. At this level, the policy is working as it should. However, there are substantial variations in the timing, frequency and type of contact within and between case study sites. These variations do not appear to be related to the time since implementation, but to existing models of care and to the variable ways in which UPNCS has been implemented.

### *Models of Care, Postnatal Contact, Satisfaction and Confidence*

For women birthing publicly in many of the birthing facilities, a number of models of care are available. Some of these, such as the extended midwifery service (EMS), community midwifery programs (CMS), team midwifery models, and birth centre, existed prior to UPNCS, may offer continuity of care, and have implications for the way that antenatal, intrapartum and postnatal care are provided. Community based postnatal care is often part of these models of care. Where women used these kinds of models, they generally experienced home visits that occurred within a day or two of discharge, patterns that UPNCS has probably had little impact on. Women in this group were the most satisfied with their post-hospital care. Women who gave birth in a birth centre were generally the most confident about their ability to cope at home (even after stays as short as 6 hours), although there is clearly a strong self-selection potential here.

*I was ready to go home then [six hours after giving birth]. We felt comfortable and I guess relieved then I think knowing then that we were going to have the midwife come and visit us the next morning was comforting to know*

*one of the main reasons why I decided to go through the birth centre because you get the six weeks home care afterwards which - we don't have any family here. So it was kind of nice to know that I was going to have a midwife visit for that length of period, yeah*

*He was born at the Mater and I went through the Mater midwife group practice which was a really positive experience. We actually went home on the same day, so we were in hospital - I think we were in there for about four hours after his birth..... I think the second time particularly I knew that I'd get more rest at home. Once I already had that experience of just the overnight, I didn't have a great deal of rest in the hospital. Also I had my husband there to assist. [The midwives] visit for six weeks after the birth. For the first days it's quite intensive. They have contact with you practically daily. If there's any concerns you can call your midwife at any time. If she's sleeping or whatever or in the birth suite then one of the*

*other midwives in the practice will answer the phone so you've got someone there immediately to talk about.*

*Especially when you've got breastfeeding problems. My midwife is also a lactation consultant, so they were quite good at assisting with any breastfeeding issues. I think most of the time that's what's difficult after the birth.*

For women birthing in public hospitals under a standard model of care (i.e. no necessary continuity of carer), the nature, frequency and timing of postnatal contact was quite variable. The organizational differences in how the postnatal contact aspect of UPNCS has been implemented are clearly related to women's experiences of postnatal care. Some of the more important aspects of service organization which had a clear impact on mothers' confidence and satisfaction include:

- information dissemination to mothers about postnatal contact
- timing of contact
- frequency of contact
- level of integration of hospital and community based services
- co-location of antenatal and child health clinics
- level and quality of communication between hospital and community based services
- information dissemination to mothers about community based support.

Some of these factors are interlinked, for example levels of integration and communication will usually be higher when services are co-located, and in these situations information about community based support will also be easier to disseminate.

### ***Knowing What to Expect and Early Contact***

When mothers were clear about the postnatal support they would receive following discharge they tended to feel more confident about leaving hospital and felt less anxious. The mothers in this group included those in 'non-standard' models of care throughout the case study sites, as well as those who used standard models of care in birthing facilities that have very clear protocols for communicating postnatal 'care pathways'. Providing mothers with information about care pathways contribute to their sense of confidence as it give mothers some predictability. Birthing facilities use different strategies to achieve this: the RBWH and Mater provide mothers with 'discharge pathway' information such as a 'care path' booklet before discharge, and women's charts are forwarded to the home visiting midwives at discharge to ensure seamless flow of information. In Townsville, the child health liaison nurse visits women in hospital each day, discusses services and ensures women are referred to the appropriate community based services.

Where these kinds of processes did not exist, and particularly when there was a longer gap between hospital discharge and contact, mothers expressed concerns and dissatisfaction. Mothers who did not have a clear, predictable sense of what would happen and who they could call on if they had problems expressed anxiety, frustration and sometimes a sense of abandonment.

*when I left hospital - I had to have forceps - and I think I had like 38 stitches or something - and when I was in hospital I had antibiotics and pain killers and when I left hospital I was just pretty much told to walk out the door - I wasn't given a prescription for pain killers or anything and I couldn't just take anything because I was breast feeding. I was in considerable amount of pain, obviously and that sort of upset me a little bit at the start - then just the lack of support*

*I contacted the midwife, because she said that she would be back, I think, two weeks later for another visit, and I never heard or seen her and I was really wanting another visit. I was wanting help. So I contacted and asked for her to please come again. I think I was expecting more because in New Zealand, you get a visit every week from your midwife, I think. I can't remember. It's about six or eight weeks. So I knew that didn't happen here but I was expecting a couple of visits at least.*

*I think they gave me some brochures and some numbers. Then a lady actually came around to organise the home visit that you normally get. For some reason she couldn't. Then some other lady came and booked me in for that. It was a morning so we stayed home. Then she rang me the following day to say I don't work mornings, they shouldn't have booked you in on that time. I was like, whatever, don't bother coming now. I've wasted a whole day. My kids are fine. I'm alright. It was a bit disappointing*

Another factor that has a significant positive impact for new mothers is the timeliness of contact after discharge. In sites where the norm is to make contact early, between days 1 and 3, mothers tended to be more satisfied with postnatal contact, and they generally also appreciated multiple contacts, especially home visits. In sites where home visit did not take place until day 8 or thereabouts, mothers grappled with issues of where to turn to for support and information. Some community health service providers expressed their concerns that crucial opportunities to assist mothers overcome breastfeeding problems may be missed by not seeing mothers until after a week following hospital discharge.

### **Co-location**

The advantages of co-location of antenatal, postnatal and community health services in 'satellite' clinics are many. In Townsville, where UPNCS was established early (2008), satellite clinics provide invaluable services and glowing reports from mothers.

*My midwife was there and that's a child health drop-in centre so I kind of went...and at the same time, I just weighed him and measured him. ...to have it sort of conveniently located so that's a positive service.*

### **Issues**

1. Those women who experienced continuity of care antenatally, intrapartum and postnatally tended to be most confident and satisfied and with postnatal care per se – they were generally women who birthed as public patients in midwifery group practice or birthing centres, and occasionally women who in shared care with their GP also benefitted from continuity. Importantly, mothers' sense of confidence was not necessarily linked to length of stay, but was clearly linked to models of care. There were also clear benefits to mothers and families where good systems for communicating information between the hospital and community care providers exist.
2. There is clearly an issue regarding the postnatal care of mothers whose babies are transferred to larger or tertiary facilities. If the mother chooses to be with her critically ill infant, mechanisms to ensure care of the mother at or near the hospital to which the baby is admitted are needed.
3. Similarly, mothers whose infants were admitted to special care nurseries found it a very stressful time and thought that the poor communication with and lack of support (especially breastfeeding) from staff exacerbated the situation.
4. Apart from one exception of a GP obstetrician in a remote area, women who birthed in the private sector had no continuity or integration of their postnatal care. These women often found it difficult to access information about community resources, including child health, available in

the postnatal period. Most felt they had needed to pro-actively seek out community based support.

5. In addition, there was often a delay in being able to get an appointment and the services offered to mothers, even at the same centre, varied.
6. Typically, there was no formal follow-up organised for women who birthed in the private sector. Most were advised to see their obstetrician at six weeks and to contact the hospital if they had any problems. Some were advised to see their paediatrician, while others picked up information about private lactation consultants at their obstetrician's rooms. A number of mothers who gave birth in private birthing facilities were not confident about leaving hospital, despite generally longer periods of hospital stay than women birthing in public hospitals. Many mothers who birthed as private patients complained about not having access to the kinds of postnatal home visiting programs available to women who birthed in public facilities.
7. The use of pharmacy nurses to provide ongoing care in the postnatal period is an issue that requires further research to gain a better understanding of who uses the service, under what circumstances, and what the possible issues might be in using this alternative to publicly provided care.



## Conclusion and Recommendations

The Universal Postnatal Contact Service has been implemented throughout Queensland so that the majority of women who birth in the public sector receive antenatal psychosocial screening and some health professional contact following hospital discharge. What and when this contact is varies. It would seem that for many services the aim is to provide a contact in the first few days after hospital discharge to identify any problems early and refer if necessary. However, in some areas the contact is much later – sometimes not until 14 days after discharge – so that purpose of the contact has to be different with mothers either contacting others with early breastfeeding or postpartum problems, weaning, or having more extensive ongoing problems. Women who are not able to be home visited and miss the phone contact (often only one call is attempted) often only receive a letter detailing the services available to them.

Unfortunately, even though the title is ‘Universal Postnatal Contact’ it does not include the majority of women who birth privately in Queensland. Very few hospitals, where public and private births are conducted at the same hospital, include private women in the postnatal contact and only one hospital attempts to provide antenatal screening to women who are going to birth privately.

Overall the service has been received positively by hospital and child health staff and by mothers who have been recipients of the service. All those interviewed felt that there had been an improvement in the care of mothers and babies and in the communication and collaboration between maternity and child health. However, many also mentioned that communication and collaboration could be better and intend to work towards this in the future. Ongoing support from Queensland Health central office is essential, particularly for health services with high staff turnover and staff with limited skills instituting and running such a service. Ongoing encouragement for collaboration between birthing services and child health is also essential. Staff attitudes, organisational and governance structure all play an important role in ensuring the divide between hospital and the community reduces rather than increases.

Some difficulties with the rollout of the UPNCS have been raised earlier in the document. The following recommendations do not necessarily address each one of these, but highlight some strategies that would enhance to effectiveness of UPNCS and have a positive impact on mothers and babies throughout Queensland.

- **Treat mother and baby as a single unit for at least the first three months after birth.**
- **Recommend that contact with mothers, including home visits, occur within the first few days after discharge.** Later contact, while still valuable, does not appear to be as effective in providing support for mothers or identifying problems early.
- **Correct any funding maldistribution so that the part of the service that is doing the work receives the money.** This point is particularly relevant were there are not good working relationships between the birthing facility and child health.
- **Provide funding for hospitals that do not birth** but do provide antenatal and postnatal services to women who birth in nearby hospitals. These hospitals have added costs to be able to provide psychosocial screening antenatally and to home visit or phone women who return home from the larger hospital.

To assist in the Identification and management of 'women and families at risk' we recommend the following strategies.

- **Provide sufficient funding to allow for extra antenatal clinic time** so that the psychosocial screening can be integrated into the normal antenatal booking process. Funding may be needed for extra staff or extra clinics including satellite, evening or weekend clinics.
- **Ensure staff are adequately trained** to administer the psychosocial screening during the antenatal period and to complete the referral and discharge forms. Because of staff turnover this training must be ongoing and provide staff with skills to ask difficult questions, respond appropriately to difficult answers and be aware of the referral pathways that are in place.
- **Recommend screening occur early enough during the pregnancy** for strategies to assist the mother and family (including contact with Child Health) to be in place well before the baby is born. Waiting until 36 weeks to screen for the first time is probably too late.
- **Encourage screening for depression during postnatal contacts.** While antenatal screening is valuable in identifying women and families 'at risk', it is not possible to recognise all women who will go on to develop postnatal depression. In many areas further screening of women at visits to the NFDS or child health are undertaken to identify postnatal depression. Unfortunately, women with depression are often those who do not access the services provided and further strategies are needed to ensure these women do not 'slip through the cracks'.

To assist in the development of a seamless transition from hospital birthing service to community based child health we recommend the following strategies.

- **Consider having birthing services and child health under the one governance structure** (e.g. Women's and Children's group) within a health service district. This structure appears to assist collaboration and integration between the services. In addition, issues with dividing funding between child health and birthing services for UPNCS were minimised and there was a greater understanding of the issues for mothers when returning home.
- **Ensure postnatal contacts are 'mother centred'** and not staff or service centred by encouraging flexibility of the services provided. Having home visit eligibility criteria based on time of discharge does not cater for women or babies who are discharged 'late' but have ongoing problems, or those whose milk has yet to 'come in'. Using a triage system to identify the most suitable services to provide a particular woman appears to work well in some areas and enables the most appropriate services to be directed to all women. Using both midwives and child health nurses with midwifery training to home visit in the first two weeks is also a useful strategy.
- **Foster the provision of combined postnatal maternity and child health services such as Newborn and Family Drop-in Services and consider extending the age limit** especially in areas that have no or limited drop-in services. They do not have to be free standing – a variety of models could be effective to meet community needs. Mothers like to be able to 'drop-in' to weigh their baby and ask any questions they have. They prefer to see the same person each time they attend and want a service that is close to home as well as providing adequate parking or easily accessible transport. In many areas women are attending nurses in pharmacies because there are no similar services provided by Queensland Health.

- **Develop satellite clinics where antenatal visits (both booking and standard), Newborn and Family Drop-in Services and ongoing child health visits can be accommodated** with collaboration between staff from the three services. These clinics are particularly important in previously underserved areas, where public transport is lacking or where health service utilisation is poor. Women become familiar with the environment, see other women progress from pregnancy to NFDS to child health and recognise staff from the other services. Where services such as this are in place women's satisfaction and continuation of service utilisation is high and information transfer between staff members is facilitated.
- **Improve referral mechanisms and collaboration between birthing facilities and community services such as Child Health and GPs.** Some birthing services only provide targeted rather than universal referrals to child health and mothers are not always aware of when they should make contact with child health or their GP. Long waits for appointments also deter mothers from accessing and midwives from referring to child health. Women who have longer contact with the birthing service (e.g. birth centre or midwifery team care who may see a midwife for up to 6 weeks) appear to find it more difficult to make contact with community based services after discharge from the midwifery service.
- **Review the mechanism for record keeping** so that there is continuity of records between the birthing service, NFDS and child health within Queensland Health and provide sufficient information for other community based services to assist mothers efficiently and effectively. Often mothers have had to provide the same information on a number of occasions for different record keeping systems and the information they provide is not always accurate or complete. Child health are not always able to generate a record for the mother even if they are involved in postnatal visiting. Electronic records may be one method to assist with these issues.
- **Develop strategies for the inclusion of women whose babies are transferred to a larger hospital because of medical problems, but are not admitted to that hospital themselves, are adequately followed up.** It appears that these women often 'slip through the cracks' even though they may have had a difficult or caesarean birth. They usually have no-one familiar to discuss their own medical problems with.

Other recommendations include:

- **Ensure information about postnatal services is readily available to public and private mothers in the antenatal period** so that they can consider the best options for community follow-up before the baby is born. Information about services is extremely difficult to find on the internet, many facilities only gave verbal information antenatally and mothers were often confused about where they should or could go after leaving hospital.
- **Develop mechanisms so that women who birth privately receive adequate postnatal care following hospital discharge.** At present many mothers who birth privately have little or no contact with health professionals in the first two weeks following hospital discharge.

## References

- Brown, S. J., Davey, M.-A., & Bruinsma, F. J. (2005). Women's views and experiences of postnatal hospital care in the Victorian Survey of Recent Mothers 2000. *Midwifery*, 21(2), 109-126.
- Bunik, M., Shobe, P., O'Connor, M.E., Beaty, B., Langendoerfer, S., Crane, L. & Kempe, A. (2010). Are 2 weeks of daily breastfeeding support insufficient to overcome influences of formula? *Academic Pediatrics*, 10(1), 21-28.
- Christie, J. & Bunting, B. (2011). The effect of health visitors' postpartum home visit frequency on first-time mothers: Cluster randomised trial. *International Journal of Nursing Studies*, 48, 689-702.
- Dane, A.C., Thompson, R. & Miller, Y.D. (2011). *A call for better care? Evaluation of the effectiveness of the Universal Postnatal Contact Services in improving women's satisfaction with care and confidence*. Brisbane, Australia: Queensland Centre for Mothers & Babies.
- Escobar, G. J., Braveman, P. A., Ackerson, L., Odouli, R., Coleman-Phox, K., Capra, A. M., et al. (2001). A randomized comparison of home visits and hospital-based group follow-up visits after early postpartum discharge. *Pediatrics*, 108(3), 719-727.
- Fenwick, J., Butt, J., Dhaliwal, S., Hauck, Y., & Schmied, V. (2010). Western Australian women's perceptions of the style and quality of midwifery postnatal care in hospital and at home. *Women and Birth*, 23(1), 10-21.
- Gagnon, A. J., Dougherty, G., Jimenez, V., & Leduc, N. (2002). Randomized trial of postpartum care after hospital discharge. *Pediatrics*, 109(6), 1074-1080.
- Goulet, L., D'Amour, D. & Pineault, R. (2007), Type and timing of services following postnatal discharge: Do they make a difference? *Women and Health*, 45(4), 19-39.
- Hirst, C. (2005). Rebirthing report of the review of maternity services in Queensland
- Jirojwong, S., Rossi, D., Walker, S. & Ritchie, B. (2005), What were the outcomes of home follow-up visits after postpartum hospital discharge? *Journal of Advanced Nursing*, 223(1), 22-30.
- Kronborg, H., Vaeth, M., Olsen, J., Iversen, L. & Harder, I. (2007), Effect of early postnatal breastfeeding support: A cluster-randomized community based trial. *Acta Paediatrica*, 96, 1064-1070.
- Li, Z., McNally, L., Hilder, L. & Sullivan, E. (2011). *Australia's mothers and babies 2009*. Perinatal statistics series no. 25. Cat. no. PER 52. Sydney: AIHW National Perinatal Epidemiology and Statistics Unit.
- Lieu, T. A., Braveman, P. A., Escobar, G. J., Fischer, A. F., Jensvold, N. G., & Capra, A. M. (2000). A randomized comparison of home and clinic follow-up visits after early postpartum hospital discharge. *Pediatrics*, 105(5), 1058-1065.
- McDonald, S.J., Henderson, J.J., Faulkner, S., Evans, S.F. & Hagan, R. (2010), Effect of extended midwifery postnatal support programme on the duration of breast feeding: a randomised controlled trial. *Midwifery*, 26, 88-100.
- Miller, Y. D., Thompson, R., Porter, J., & Prosser, S. (2011). *Findings from the Having a Baby in Queensland Survey, 2010*. Queensland Centre for Mothers & Babies, The University of Queensland.
- O'Connor, K.O.S., Mowat, D.L., Scott, H.M., Carr, P.A., Dorland, J.L. & Tai, K.F.W.Y. (2003). A randomized trial of two public health nurse follow-up programs after early obstetric discharge. *Canadian Journal of Public Health*, 94(2), 94-103.
- Rush, J., Chalmers, I., & Enkin, M. (Eds.). (1989). *Care of the new mother and baby*. Oxford: Oxford University Press.
- Zadoroznyi, M. (2006). Surveillance, support and risk in the postnatal period. *Health Sociology Review*, 15(4), 353-363.